

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

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4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

September 14, 1983

Mr. William L. Sharrer
Environmental Engineer
Geokinetics, Inc.
391 Chipeta Way D-2
Salt Lake City, Utah 84108-1282

RE: Comments on the Initial Baseline
Design Studies for Geokinetics
Seep Ridge Project
ACT/047/019
Uintah County, Utah

Dear Mr. Sharrer:

The Division has reviewed the initial baseline data collection and field study proposals submitted in conjunction with Geokinetics' early Mining and Reclamation Plan (MRP) designs as presented at the August 19, 1983 meeting. This "cooperative program development technique," although superficially premature, is so innovative that commendations are in order. The anticipated benefits of this early coordination will certainly be realized during the final review. Geokinetics' presentation has afforded the Division staff the ability to integrate the early design reviews into its busy schedule gradually and will hopefully eliminate lengthy correspondence and review time at a later date.

The following comments are offered:

1. The "scope of work" presented by Mariah Associates for Geokinetics should provide all necessary data to establish revegetation success standards. Soil chemical parameters to be monitored, method of analysis or reporting format have not been detailed. Consideration should also be given to ascertaining the impact to soil microbiology attendant to stripping and relocating soils.
2. Is the Texaco-Seep Ridge Unit No. 2 well the only deep well near the sites that can be used to establish underlying Paleozoic and Mesozoic structure?

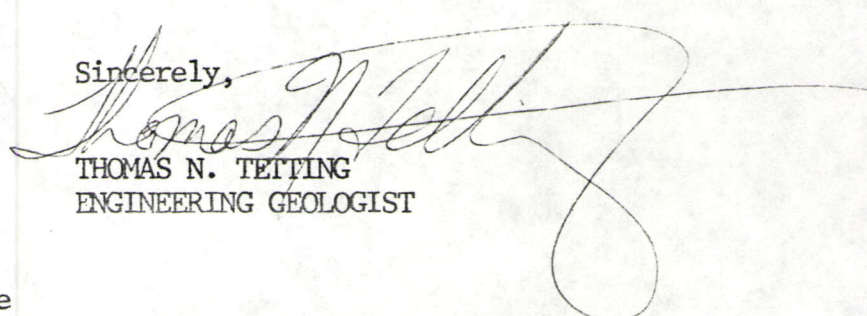
The investigation of the deep-seated structural influence of the Uncompahgre uplift may define more specific areas of joint-fracture development and, therefore, provide additional data on aquifer communication or potential permeability and transmissivity parameters.

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3. Characterization of the peripheral limits of blasting effects ought to be developed, three-dimensionally.
4. Postburn coring of present retorts should help to quantify effects of retorting on permeability. Suggested minimums would be three per retort, adjacent areas should also be investigated.
5. Estimates of horizontal ground water movement times should be provided as they would relate to the "appearance of new springs and seeps in outcrop areas." Monitoring intervals should be adjusted to consider these factors.
6. Postburn retort water sampling "analysis" and monitoring should be elaborated upon as to the periodicity and length of time it will be carried out, e.g., 10 years, 20 years, etc.
7. Residual heat measurements should be monitored closely while developing heat retention curves, dissipation factors, influence on groundwater vaporization times, and effects on soils and revegetation.
8. Detailed reclamation cost estimates have not been provided for any element of the program yet. Criteria such as methodology of cost estimate selection, items to be considered and variable achievement standards should be addressed.
9. The "two phase approach" should be refined, perhaps using the White River Oil Shale Project as a model.
10. Contact with or at least concern for providing the Resource Development Coordinating Committee time to review the project should be considered.

Thank you for allowing the Division the opportunity to comment at this time.

Sincerely,


THOMAS N. TETTING
ENGINEERING GEOLOGIST

TNT/jvb

cc: Jim Bradley, Utah Energy Office
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